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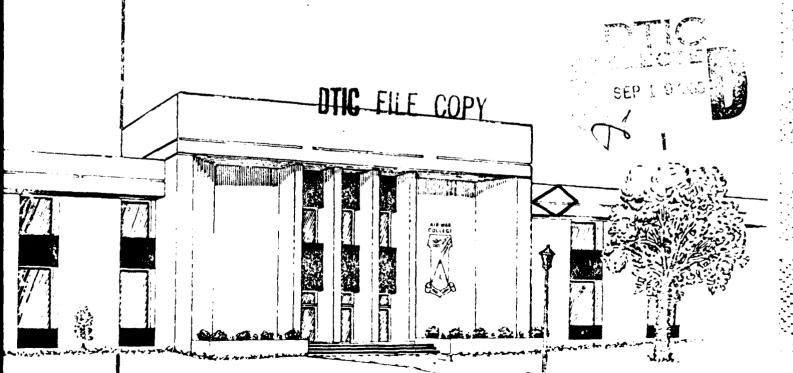
RESEARCH REPORT

No. AU-AWC-85-240

SINGAPORE ECONOMIC ACHIEVEMENT:

A MODEL FOR RAPID GROWTH

By COLONEL GARY YEO PING YONG REPUBLIC OF SINGAPORE AIR FORCE



AIR UNIVERSITY
UNITED STATES AIR FORCE
MAXWELL AIR FORCE BASE, ALABAMA

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AIR WAR COLLEGE AIR UNIVERSITY

SINGAPORE ECONOMIC ACHIEVEMENT: A MODEL FOR RAPID GROWTH.

BY

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COLONEL, REPUBLIC OF SINGAPORE AIR FORCE

A RESEARCH REPORT SUBMITTED TO THE FACULTY.

MAXWELL AIR FORCE BASE

15 MARCH 1985.

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ABSTAINER

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AIR WAR COLLEGE RESEARCH REPORT SUMMARY

TITLE: Singapore Economic Achievement: A Model For Rapid Growth.

AUTHOR: Gary Yeo Ping Yong, Colonel, Republic Of Singapore Air

Force.

Since 1959 when Singapore achieved self-government and particularly 1965 when Singapore became an independent nation following separation from the Federation of Malaysia, Singapore has taken bold steps in implementing ambitious development policies and has achieved remarkable economic growth and social stability. Its per capital Gross National Product has increased steadily by more than six times from a modest figure of \$2190 (equivalent to US\$1040) in 1968 to \$13,794 (US\$6,569) in 1983, the second highest in the East Asian region after Japan. Singapore did not have a stable begining as an independent country. Beset by the many early difficulties such as explusion from Malaysia, Indonesian confrontation, the British military withdrawal, rising unemployment, labour unrest, a housing shortage, and racial conflict, Singapore was able to overcome all these problems and at the same time raise the living standard of its population. It has successfully transformed its economy from that of an entrepot to a manufacturing-service economy. During this period Singapore consistently maintained good economic growth rates, full employment, high productivity, and low inflation.

This study attempts to analyse the strategies adopted for Singapore's economic and social developments and how they have set a model for rapid growth for both developing and industrialised countries.

BIOGRAPHICAL SKETCH

Colonel Gary Yeo Ping Yong , RSAF, was born in Singapore. He received his schooling and college education in Singapore. He graduated from the Singapore Polytechnic in 1965 with a diploma in Mechanical Engineering. After graduation, he was enlisted into the Singapore Armed Forces, where he underwent initial officer training. On receiving his commission, he was sent to the United Kingdom for pilot training. He went through basic jet, advanced jet, and operational conversion training and thereafter the flying instructor course. He returned to Singapore in 1971 and spent three years instructing basic and advanced flying training. IN 1973, he was selected for Skyhawk aircraft conversion training with the US Navy in the United States. On completion, he returned to Singapore flying the Skyhawk aircraft with No.142 Squadron. He assumed command of the Squadron in 1975 and at the end of his tour of duty, he was posted to Headquarters RSAF first as Head Flying Operations Branch and later as Head of the Air Operations Department. In 1979, he was reassigned to his former Airbase as the officer commanding of the Operations Wing. After a short tour, he was appointed as the commander of the airbase operating Hawker Hunter, Skyhawk, and F5E aircraft. In 1982, he moved back to Headquarters where he took over as Deputy Commander of the RSAF and served in this position until his selection for the AWC course in 1984.

SINGAPORE ECONOMIC ACHIEVEMENT: A MODEL FOR RAPID GROWTH.

I. INTRODUCTION.

Twenty years ago, most people gave Singapore hardly a ghost of a chance to survive as an independent nation. For Singapore, a global city state with a land area not more than 240 square miles, no hinterland nor other natural resources and having then been evicted from the Federation of Malaysia, the future had indeed looked ominous. The Indonesian confrontation was still in full swing and among other things, the trade embargo imposed by Indonesia was having a telling effect on Singapore's economy. Internally, the political situation was far from stable as the country was plagued with the problem of potentially explosive racial conflict. A failure to resolve or overcome these series of critical internal and external problems could easily have brought about economic collapse, political disorder and social disintegration.

Many authors such as David Bonavia, a British economist, and Iain Buchanan, a British lecturer at the University of Leicester, had in fact painted a very bleak future for an independent Singapore without a merger with Malaysia. Bonavia, for one, predicted a "dark horizon" for Singapore and he argued that the only sensible answer was a fresh accommodation with Malaysia to restore the natural economic relationship. 1 Buchanan was equally pessimistic, predicting economic chaos and thus civil unrest leading to the demise of an independent Singapore. 2

These prophets of doom were to be proven wrong. Singapore not only was able to successfully meet the challenges but it has, at the same time, effectively carried out many impressive social and economic development programs to industrialize its economy and to raise the living standards of its population. During the period 1960-1983, Singapore's GDP gained by 9 per cent per annum. Singapore's real GDP at factor cost statistics for the period 1960 to 1983 are given in Table 1.1. The figures in this table show that since 1966 (after Singapore's secession from Malaysia and independence in 1965) Singapore had a double digit real growth rate in GDP, up to 1973. This phenomenal growth rate slowed down during the oil crisis period of 1974 but by 1977, the economy recovered, though the rate had not been as high as during the pre- 1974 figures. However, figures for 1978, 1979, 1980, 1981, 1982 and 1983 show that Singapore has consistently achieved a yearly real growth rate of no less than 5 per cent.

Singapore's per capita income has also grown quite impressively. One of the reasons for this is the impressive decline in population growth from 4.3 per cent in 1959 to 1.2 per cent in 1983. This in turn has been due mainly to the decline in the reproduction rate from, for example, 39.5 per i,000 persons in 1959 to 16.9 per 1,000 persons in 1979.

On the basis of recent figures produced by Euromoney's 1984 world economic performance ranking, Singapore ranks as the fastest growing economy in the world. Singapore's fast growing economy was represented by the phenomenal growth in GDP figures in the last

TALLE 1.1

Actual GDP, GNP, and Population, Singapore, 1959-1983

	COP at fa	GDP at factor cost	COP at fa	GOP at factor cost	Per capital GNP	al GNP at	Popul	Population
	(current	(current prices)	(1980 prices)	rices)	current	current prices		
Year	\$ million	% yearly	\$ million	% yearly	₩	% yearly	millions	% yearly
		increase		increase		increase		increase
1959	Λ•α•	n.a.	ח.פ.	n.a.	n.a.	n.a.	1,58	4.3
1960	2150	∩•a•	4188	n.a.	٦•٩•	n.a.	1,63	3.5
1961	2329	8.3	4537	8.3	п.а.	.8.	1.69	3,3
1962	2514	7.9	4854	7.0	п.а.	п.а.	1.75	2.6
1963	2790	11.0	5338	10.0	п.а.	П•а•	1.80	2.5
1964	2715	-2.7	5152	-3.5	n.a.	n.a.	1.84	2.5
1965	2956	8.9	5539	7.5	п.а.	n.a.	1,89	2.5
1966	3331	12.7	7100	28.2	n.a.	n.a.	1.93	2.3
1967	3746	12.5	5884	-3.0	п.а.	n.a.	1.98	2.0
1968	4315	15.2	7839	13.9	2190	n.a.	2,01	1.6
1969	5020	16.3	8913	13.7	2502	16.0	2.04	1.5
1970	5805	15.6	10136	13.7	2831	14.8	2.07	1.7
1971	6823	17.6	11404	12.5	3229	16.2	2.11	1.7
1972	8156	19.5	12936	13.4	3784	19.4	2,15	ر. 4
1973	10205	25.1	14427	11.5	4558	22.7	2,19	1.7
1974	12543	22.9	15343	6.3	2496	22.8	2,23	1.4
1975	13373	9•9	15970	4.1	5905	8.9	2.26	1.3
1976	14575	0.6	17163	7.5	6277	7.7	2,29	1.4
1977	15969	9.6	18519	7.9	6772	8.6	2,33	1.2
1978	17751	11.1	20119	8 . 6	7535	12.2	2,35	1.2
1979	20452	15.2	22009	9.4	8260	15.0	2,38	1.2
1980	24285	18.7	24285	10.3	9673	14.4	2.41	1,3
1981	28696	18.2	26698	6 . 6	11352	18.8	2.44	1.2
1982	31946	11.3	28393	6.3	12569	12.1	2.47	1,2
1983	35171	10.1	30647	7.9	13794	11.1	2,50	1,2

Source: IMF, Government finance statistics yearbook, 1984.

decade. Singapore's GDP rate of 8.4 per cent outranked Taiwan's 7.95, South Korea's 7.81 and Hong Kong's 7.60 per cent. 3

It is not only in GNP growth that Singapore comes out top.

Inflation, the pernicious eroder of hard-won gains, is typically very low. Singapore's record of inflation is bettered by few other countries. The change in consumer prices has been slow for Singapore, recording an average of 4.27 per cent for the last 10 years. The details are shown in Table 1.2.

Unemployment remained high during the 1960s but declined to 6 per cent in 1970 and 3 per cent in 1980.

The amount of public housing provided by the government increased from about 23,000 units to over 358,000 units in 1980, providing homes for about 72 per cent of the population. Table 1.3 shows the government's impressive achievements over the years from 1960 to 1980. Public health services are adequate for the needs of the population. The ownership of automobiles, television sets, radios and telephones is among the highest in the region.

These impressive achievements in social and economic development since independence have made Singapore a model of outstanding development. Singapore today is considered to have achieved a highly industrialized and full employment economy with a well-disciplined, well-planned and dynamic society.

What then are the reasons for Singapore's success? Precisely, what factors helped Singapore progress beyond what anyone would have thought possible?

Dr. Goh Keng Swee, former Deputy Prime Minister of Singapore,

TABLE 1.2
Equilibrium Indicators, Singapore

Year	Consumer P (June 1977 – M	rice Index ay 1978 = 100)	Unemployment rate
1641	Number	Over previous year (%)	late
1959	n.a.	n.a.	n.a.
1960	55.2	n•a•	n.a.
1961	55.4	0.4	n.a.
1962	55.7	0.5	n.a.
1963	56.9	2.1	n.a.
1964	57.8	1.6	n.a.
1965	58.0	0.3	n.a.
1966	59.2	2.7	8.9
1967	61.1	3.2	8.1
1968	61.5	0.7	7.3
1969	61.3	-0.3	6.7
1970	61.5	0.4	6.0
1971	62.7	1.9	4.8
1972	64 . D	2.1	4.7
1973	76.5	19.6	4.5
1974	93.6	22.3	4.0
1975	96.0	2.6	4.5
1976	94.2	-1.9	4.5
1977	97.2	3.2	3.9
1978	101.9	4.8	3.6
1979	106.0	4.0	3.3

Source: Yearbook of Statistics, Singapore.

TABLE 1.3

Public Housing (Selected Years, 1960 - 1980)

	ндв	flats	Per cent of living in pub	•
Year	Total number	Per cent	HDB flats	Owner-occupied
1960	24,701	-	9.1	-
1970	118,544	26.3	34.6	9.1
1971	126,710	29.4	37.4	11.0
1972	138,027	32.6	41.6	13.6
1973	161,312	36.4	42.7	16.2
1974	185,581	39.7	45.6	18.5
1975	211,079	42.8	50.0	21.4
1976	236,966	46.7	55.0	25.7
1977	274,078	53.0	59.0	31.3
1978	305,540	55.0	64.0	35.2
1979	328,562	58.2	66.0	38.4
1980	346,371	61.8	68.0	42.0

Sources: Singapore Department of Statistics, Yearbook of Statistics 1980/1981; and Housing Development Board, Annual Report 1975/1976.

identified four factors that were behind Singapore's material progress and improved living standards.

They are: Singapore's neighbours, Singapore's priorities, Singapore's models and the people.

On Singapore's neighbours, Dr Goh said the progress and political stability of Malaysia and Indonesia had helped Singapore to prosper. The two neighbours had achieved best economic growth since 1965 and as a result enjoyed political stability. Singapore had prospered together with them making the region one of the fastest growing in the world, attracting investments from the major industrial countries, namely the United States and Japan.

On Singapore's priorities, Dr Goh said that Singapore had learnt to be self-reliant. As a small country with no natural resources, it had to learn to make the best use of human talent. This meant continuous improvement of human skills - better and keener managements, and a vigorous and productive workforce.

The third factor was Singapore's choice of model. Studying and adapting from the best of the British, American and Japanese systems also helped. "There is nothing new under the sun — whether it is setting up an MRT system, a container port, We do not try to reinvent the wheel; we study how other people do it. We learn and adapt, not imitate without thinking." 5

The fourth factor was the people. Credit was given to the diligent and enterprising spirit of the people in that given the opportunity to learn they will improve themselves.

That the government played a crucial role in Singapore's

success is without a doubt. After all, Singapore has been stable since the early 1960s. It has been ruled by the same government, headed by Prime Minister Lee Kuan Yew since 1959. Following the break with Malaysia, the political leadership had adopted an outward looking policy and Singapore had definitely benefited from favorable international developments. This factor, together with the four mentioned earlier, has enabled Singapore to excel in every field of its endeavours in social and economic development over the past twenty years.

The next chapters will discuss in greater details some of the major development policies which have contributed to rapid social and economic growth in Singapore.

II. THE IMPETUS FOR INDUSTRIALIZATION.

Founded in 1819 by Sir Stamford Raffles, Singapore grew rapidly as an entrepot for British trade with the East and Southeast Asia. Singapore was also used by the British as a forward military base east of the Suez. Its strategic position on the sea route between Europe and East Asia, and in the center of the Malay Archipelago was of great importance, both militarily and economically, to British imperial interests.

Since 1820, Singapore's entrepot trade expanded and for one hundred and fifty years this was to be the lifeline of the country's economy. Primary products from the surrounding archipelago came to Singapore where they were then distributed for shipment to Europe, North America and China. From Europe came manufactured goods and capital and they were likewise distributed from Singapore to throughout colonial Asia.

However, towards the mid-1960s, the entrepot trade of Singapore declined. There were three reasons for this. By 1960, most countries in Southeast Asia had already gained their independence from colonial rule and they preferred to trade directly rather through Singapore. The Confrontation policy imposed by Indonesia on Malaysia of which Singapore was a part until its secession in 1965, was also a factor. As a result of the severed trade relations with Indonesia, Singapore's entrepot trade declined by some 16.8 per cent. The final factor was of course, the separation of Singapore from Malaysia. The hinterland which Singapore enjoyed was no longer readily available.

The decline of Singapore's entrepot trade together with the announcement of complete British military withdrawal in 1968 gave the impetus for the People's Action Party (PAP) government to adopt tough policies for survival. The laissez-faire policies of the colonial era had to give way to a more activist and interventionist approach taken by the government. The PAP government was therefore obliged to play a very active role in the social and economic development of the Republic.

The most urgent task and the most feasible solution to Singapore's economic development during this period was to embark on a bold and comprehensive industrialization program. For the industrialization program to succeed, the government was quick to realize that its policies had to meet the following requirements:

- 1. the presence of an effective, honest government totally committed to economic development and capable of harnessing the support of its people towards the goal of development;
- 2. the provision of sound social and economic infrastructures for economic development;
- 3. the creation of a conducive environment and incentives to attract foreign investment;
- 4. the stability of the labour situation to ensure favourable conditions for economic development in the Republic;
- 5. the direct participation of the government in economic enterprises considered crucial for stimulating the development of other economic activities.

III. AN EFFECTIVE AND COMMITTED GOVERNMENT

Since 1959, when Singapore gained self-government, it has been ruled by the same political leadership under the People's Action Party (PAP). Furthermore, the control of the government by the PAP throughout has remained in the hands of the same top PAP leaders. Most prominent of these is Lee Kuan Yew, the Prime Minister and the secretary-general of the PAP. Others in the top echelon leadership are Dr. Goh Keng Swee, who until the beginning of this year when he retired from politics, was the First Deputy Prime Minister and for most of the time a senior vice president of the PAP; Dr. Toh Chin Chye, who until 1980 was the Minister of Health and the chairman of the PAP; and S. Rajaratnam, who until the beginning of this year was the Second Deputy Prime Minister when he stepped down in favor of younger leaders.

But political continuity does not automatically mean political stability nor does political stability automatically generate economic development. For Singapore, fortunately, political continuity has been accompanied by political stability. In the late 1950s and early 1960s the PAP government overcame what it perceived as serious internal threats from communist elements. There is no significant opposition to the Government. Indeed, the ruling PAP government had been so successful that for five general elections (1968, 1972, 1976, 1980 and 1984) the various opposition parties have failed to secure a single seat in Parliament except for the last election, when two opposition members were voted into

Parliament out of the seventy nine seats.

After independence, the PAP government was also faced with the problem of creating unity out of the different racial mix of Singapore. This it was able to accomplish by downplaying Chinese, the language of the majority. Malay is the national language, but English, as both a business language externally and a neutral language internally has been pushed. Housing development has been used as an arm of communal policy: Chinese, Malays, Indians and Others have been deliberately intermixed to promote integration and to break down the communal pattern of living evident in the past.

Political continuity and political stability were accompanied by a relentless policy adopted by the PAP government, of pursuing economic development. This driving force was reinforced by a spirit for survival that came after Singapore was suddenly thrown out from the Federation of Malaysia. Throughout, the policy of rapid economic development remained the top priority of the PAP government. This commitment of the government was a necessary condition for rapid economic growth.

The total commitment by the PAP government to rapid economic development took the form of generating more investment whether private or public and whether foreign or local. The industrialization program was taken on as broad a front as possible. Diversity of production was to be the strategy. Part of the development strategy was the encouragement of competition rather than protectionism and the encouragement of export orientation rather than import substitution.

Other than industrialization, development has also taken place in other fronts, including trade, tourism, finance, housing, education and communication, each interacting on the other and together providing the overall momentum for rapid economic growth.

IV. ROLE OF GOVERNMENT IN ECONOMIC ENTERPRISES.

Besides providing the necessary social and economic infrastructures, the government participated directly and exerted a very strong influence in the promotion of industrialization in Singapore. The Economic Development Board (EDB), which acts as the overall agency for economic development under the government, was established in 1971. The Board initiated projects and financed them in the form of loans and equity participation.

In addition, the government has participated in other business enterprises through the establishment of wholly-owned and partially-owned companies. Government participation in business started as early as 1961 when it held equity shares in companies such as the National Iron and Steel Mills and the Prima Flour Mills. At present, the Singapore government owns or participates in a large number of key industries and businesses in trading, transportation, communications, finance, construction, shipbuilding, electronics and other manufacturing industries. As examples, the government has equity shares in Keppel Shipyard Private Limited (100 per cent), Sembawang Shipyard Limited (75 per cent), Neptune Orient Line (100 per cent), Singapore International Airlines (100 per cent), Development Bank of Singapore (49 per cent) and Post Office Savings Bank (100 per cent).

The government's participation in industries and business enterprises has been aimed at stimulating industrialization and in the direction of restructuring the economy, apart from generating

revenue for the government. As pointed out by the Prime Minister, Lee Kuan Yew, in 1969, the government is "not hesitant to use public funds to stimulate growth in certain industries where private enterprise is shy or sluggish." Also the government believes that it can have a catalytic role; "as we want to restructure and upgrade our economy quickly, the state must resume its role as an entrepreneur, not to supplant private enterprise but to encourage and assist entrepreneurs to venture their capital on new machinery with labour saving devices." As an example, the take-over and conversion of shipbuilding and ship-repairing facilities following the British withdrawal from the Singapore Naval Base resulted in the formulation of the Keppel Shipyard Private Limited and the Sembawang Shipyard Limited. Such involvements enable the government to ensure that developments in the economy are in line with its objectives in national planning.

The government's participation in industries and business has also been to attract local and foreign capital into key industries. Traditionally, local capital has been invested in economic activities associated with entrepot trading. With the government as a whole or part investor, it provides some form of security to private investors who may be wary of new ventures.

Throughout the last twenty years, the government had sought to expand its participation not only in the local industries but also the international business. For example, in June 1981, the government set up a high-powered investment corporation whose one of the main aims is to buy up and/or into high-technology companies in

the West in order to upgrade and accelerate Singaore's industrial progress. With a operating fund of between US\$7 and 12 billion, this corporation ranks among the ten largest in the world. The fund comes from part of Singapore's foreign exchange reserves. The chairman of the corporation, Government of Singapore Investment Corporation Private Limited, is the Prime Minister and its board of directors consists of leading members of the cabinet.

The government's role in economic enterprises has certainly resulted in many economic benefits in the case of Singapore. The most important of which has been to pioneer certain economic activities in the restructuring of the economy towards industrialization and services and away from traditional entrepot trading. In promoting economic growth, the role of the government has helped in the stimulation of both domestic and foreign capital.

V. FISCAL INCENTIVES.

Another development strategy adopted by the government in promoting investment in Singapore was through the fiscal incentives scheme. An increase in foreign investment was considered important to generate more capital than was available within its own national boundaries for rapid industrialization. The Singapore government therefore initially provided some fiscal incentives to attract foreign investments and later modified and included more incentives to provide a broader basis to promote industrialization.

The government has consciously steered the economy in certain directions and in this sense has given substantial incentives to pioneer industries, i.e. industries in new and underdeveloped fields which are judged worthy of support. The Pioneer Status scheme provides for zero tax on company profits for five to ten years depending on the merits of the projects, for example, the type of product, skills and technology.

The Export Incentive Scheme which provides for 4 per cent tax on export profits, instead of the normal 40 per cent on company profits for a period of five to fifteen years, was introduced to encourage exports or for cases where it would be unjustified to award pioneer status because of existing local manufacture.

The Small Industries Finance Scheme was also introduced in 1976 as a loan scheme. Operated jointly by the Economic Development Board and other approved financial institutions, it was aimed at encouraging the development and technical upgrading of the

operations of small industries. For companies with specialized projects of unique economic and technological benefit to Singapore financial assistance such as equity and/or loan capital can be obtained through the Capital Assistance Scheme.

To develop local applied research and product development capability and to build up indigenous technology, the government set up the Product Development Assistance Scheme for these purposes.

Administered by the Economic Development Board, the scheme is to encourage local companies to develop new, or improve existing products/processes related to their manufacturing activities.

The International Trade Incentives was introduced to encourage trading companies which export Singapore-manufactured products or domestic produce. Under this scheme, qualified trading companies can apply for five years' concessionary company tax at 20 per cent on export profits instead of the normal company tax rate of 40 per cent.

Foreign investments in Singapore are also backed by guarantees. In 1966, Singapore signed a investment guarantee agreement with the United States. Similar agreements were signed with other countries such as Canada in 1971, Netherlands in 1972, Federal Republic of Germany in 1973, United Kingdom in 1975, France in 1975, Switzerland in 1978, Belgo-Luxemburg Economic Union in 1978 and Sri Lanka in 1979. Under these agreements, investments by nationals or companies of both contracting parties in each other's respective country are protected for a specified period, usually fifteen years, against war and non-commercial risks of expropriation.

The success of these incentive schemes was without a doubt.

Besides promoting the local industries, they also attracted foreign investments. In 1971, foreign investments amounted to \$116 million and by 1980, the figure was \$1441 million. The success of the industrialization policies made it possible for Singapore to launch the second industrialization program in 1979 to shift the economic structure towards high-technology industries.

VI. A STABLE AND CONDUCIVE LABOUR CLIMATE.

The fourth condition required for successful industrialization as realised by the PAP government was a stable and conducive labour situation in Singapore. This condition is as important as the other three mentioned in the last chapters for no matter how attractive the economic infrastructure and fiscal incentives are, an unstable and restless labour force can act as a friction to the economic development of the country. Labour unrest in the late 1950s had kept investors away. At the outset in 1959, the PAP government realised that a conducive industrial climate had to be created to attract business investment. This meant that industrial peace had to prevail in Singapore.

In Singapore, industrial peace prevails because of the cooperation between the labour movement, management and government, This cooperation has existed and can be traced to as early as the early 1960s.

In the 1950s, there were much labour unrest and riots. However, by the late 1950s, the situation had improved partly because most of the troublesome unions had already been dissolved or their militant leaders detained by the Labour Front government. There was still a struggle between the moderate and the left-wing factions in the central organization of trade unions in Singapore. The left-wing union was later deregistered and the moderates formed the National Trade Union Congress which had the full blessings of the PAP government.

Since 1961, the NTUC had been closely associated with the PAP government. The NTUC leaders had always shared the same aspirations as the government in that they recognised militant unionism must give way to social unionism and confrontation replaced by cooperation with the management and the government. These, they believed, were the better alternatives in the long term to the well being of the workers and the country. Trade Unions in Singapore were to be more involved in promoting the welfare of the workers through the setting up of many cooperative enterprises such as WELCOME supermarkets, INCOME insurance schemes, COMFORT taxis, bus services and NTUC travel services.

The PAP government, on the other hand, had closely guided the NTUC. At present, there are more than ten Members of Parliament serving as executives of the NTUC. In addition, the PAP-NTUC Liaison Council was formed to strengthen the relationship between the trade unions and the ruling party.

The PAP government also introduced various laws to regulate the relationship between employers and employees, and to promote industrial peace. The Industrial Relations Ordinance and the Employment Act were passed in 1960 and 1968 for these purposes.

The Industrial Relations Ordinance was to give the government an active role in regulating industrial relations. It introduced procedures for the speedy settlement of industrial disputes and defined strikes as illegal after the Industrial Arbitration Court had taken notice of a dispute. A strike is possible only with the tacit approval of the government. Decisions or awards made by the

Industrial Arbitration Court are binding on the parties concerned and not subject to challenge in a court of law.

The Employment Act was to regulate the rights and duties of employers. It sought to give the upper hand to employers. The number of holidays, rest days, annual leave, and sick leave were reduced. Workers were only entitled to retrenchment and retirement benefits after three and five years of service respectively. Bonus was limited to one month's wage and the standard week was fixed at 44 hours.

Mr Rajaratnam, the then Minister of Labour explained "... these laws, frustrating though they are, are necessary to stimulate and sustain rapid economic development." 11 This is because the government believed that the success of the industrialization programs rested on low wages and a disciplined work-force. Employers in Singapore and foreign investors reacted favourably to these new labour laws. Leaders of the NTUC also supported and accepted the new legislation.

Wage restraint was another policy adopted by the government. This policy was effective in the 1960s when Singapore suffered from high unemployment and widespread underemployment. During this period, economic expansion reduced unemployment but exerted little pressures on wages. Thus, average nominal weekly earnings of production, transport and manual workers rose by an average of only 2 per cent per year in the 1960s. In real terms, earnings grew by only 1 per cent as inflation averaged 1 per cent during that period. In the 1970s with the attainment of full employment, earnings rose rapidly, averaging 10 per cent a year between 1972 and 1979.

Moreover, various economic sectors experienced different growth rates and their demands for workers were also different. As a result, wage differentials among the various economic sectors and between the local companies and multi-national corporations, became apparent.

The National Wage Council (NWC) was thus set up in 1972 to recommend orderly wage changes. Though by its term of reference, it can only provide wage guidelines, its recommendations made so far have been accepted and implemented by the public sector and most employers in the private sector. The NWC wage guidelines since 1972 have strongly influenced sectoral rates of wage increases. As a result, the inter- industry wage structure has remained stable, despite the different rates of output and employment growth in the economy.

The NWC recommended high wage increases in the 1972-1974 period partly to offset inflation and partly to encourage firms to use labour efficiently. In the mid-1970s, the NWC recommended modest wage increases because of the world recession. However, in 1979, the government realized that it had to shift to a high value-added and skill intensive industrial strategy. So the NWC recommended high wages to curb the demand for unskilled labour and to facilitate the restructuring of the Singapore economy. 12

The wage changes that are closely guided by the government, industrial relations that are strictly regulated by legislation and trade union movements that are directly monitored by the ruling party have all contributed to a stable and conducive labour climate

in Singapore. This together with the other conditions of fiscal incentives, and the government's participation in industries and business enterprises haved helped to encourage the inflow of foreign investment and the growth of the economy in the last twenty years.

VII. SOCIAL DEVELOPMENT.

Whilst the PAP government concentrated on creating "economic" conditions for economic development in Singapore, it did not neglect the social factor at all. In fact, it realized that socio-political factors and economic factors were not separate but closely interlinked in the process of economic development. The Prime Minister, Lee Kuan Yew was quick to point out in 1971 that "there are crucial non-economic factors that make for growth. These factors unless monitored and prevented from getting out of control, will undermine social stability which, in turn, will cause a loss in confidence, leading to a drop of investments, setting a chain reaction in motion." 13 Uppermost in the minds of the PAP government leaders were social factors such as housing for the people, community development, education and communication.

Public Housing. In the 1950s, Singapore faced problems of overcrowding and housing shortage. Over 70 per cent of the population lived in shop houses in the centre of the city and temporary structures in the suburbs. Housing problems bred social ills and created health hazards. When the PAP government came into power in 1959, the housing problem was accorded the top priority for the government to resolve. The Housing and Development Board (HDB), a statutory board, was established in 1960 to undertake large scale public housing programs. These programs were aimed at building low cost housing catered mainly for the lower income families.

Another body, the Housing and Urban Development Company (HUDC) was

formed in 1975 to look after the housing needs of the middle income groups. The Urban Redevelopment Authority (URA) was responsible for slum clearance and urban renewal.

Since the inception of the HDB, five Five-Year Building
Programs would be successfully completed by March 1985. According to
the last HDB Annual Report in 1980, a total of 334,444 units of
high-rise flats had been built by the HDB. More than 65 per cent of
the population in Singapore were then living in public housing
estates. At present, the HDB is building about 30,000 units a year.
It is estimated that by 1992, when the re-development program is
completed, there will be about 80-85 per cent of the total
population living in high rise public housing estates. 14

As the objective of the public housing program is to help the people in Singapore own their flats, the selling prices of the HDB flats are fixed below cost and the selling prices of the HUDC flats are well below market prices. As an example, the HDB is subsidizing each three-room flat by 44 per cent, a four-room flat by 33 per cent and a five-room unit by 27 per cent. The cost of each unit includes the cost of construction only as the value of the land is normally not taken into account. Compared to private flats, the selling prices of HDB flats are about 70 per cent cheaper, and the selling prices of HUDC flats are about 50 per cent cheaper. 15

The success of the public housing programs in Singapore served as an important measure to counter check the ever-rising prices and rentals of housing in a land scarce society. Rising prices for housing can well be a factor for increasing production costs and

thus weaken Singapore's competitiveness in the international economy.

Another effect of the successful public housing program is its contribution to social stability and ethnic integration. In the 1950s, housing shortage and substandard living were sources of popular discontent and social disorder. The housing shortage problem has more or less now been resolved and housing conditions have improved significantly. The majority of the people are now able to possess their own flats at reasonable prices.

Previously, there was a segregation of different ethnic groups living in the various communities throughout Singapore. As a result of the public housing programs, the different ethnic groups have been relocated to live together in public housing estates. There has been much calm in Singapore since the last racial riot in 1965. In this sense, the public housing program has been successful in promoting ethnic integration.

Community Development. Another achievement in social construction in the last twenty years, has been the development of the community centres. Community centres have served as useful means for mobilizing mass participation in community development and mass support of government policies.

The first community centres were set up in the early 1950s when Singapore was still a British colony. In the initial years, the government was undecided on the question of control over the community centres. It was generally felt that a loosening of control and decentralization of decision making for community activities

would be necessary if the centres were to develop into mass organizations to be spontaneously participated in and supported by the people. Community centres during this period were therefore autonomous and they were run by management committees which were elected by those who participated in the centre's activities. This, however, led to a situation whereby most of these committees were controlled by those who haboured political aspirations.

The PAP leaders realized the potential role which the community centres could play in the political dynamics of the country. On obtaining power in 1959, the PAP immediately decided to disband all management committees and the community centres were put under the control of Department of Social Welfare. With further reorganization in 1960, the management of the community centres was placed under the charge of the People's Association, a coordinating body with statutory status. The Prime Minister is the chairman of the People's Association and a minister appointed by the chairman serves as deputy chairman.

One of the objectives of the formation of community centres is to promote community cohesiveness and social integration and, to this end, to encourage participation of people of different ethnic communities in various activities and programs organized by the community centres. Moreover, the community centres have been used as important agents to mobilize mass support for the government, particularly in relation to its development policies.

<u>Education</u>. The PAP government also considered education as an important mean for promoting national integration. Since 1959, the

PAP government has "nationalised" all schools and colleges in Singapore and put them under the control of the Ministry of Education.

Pre-1959, particularly during the colonial era, the government recognised and supported only English education. Education in the other language streams was not given equal treatment or equal opportunity to develop. The non-English schools therefore, had to depend on the support of their own ethnic communities and developed along their own lines. As a result, these schools were influenced by the education systems of their ethnic groups and they in turn, strove hard to promote the values of their ethnical cultures.

Moreover, all textbooks used in both the English and non-English schools, were without local backgrounds and experiences. The English schools used textbooks imported from England; the Chinese schools' textbooks were from China or Taiwan; and the Tamil textbooks came from India.

Under the influence of such an educational system, it was impossible to cultivate a sense of national unity and for that matter, create a common national identity. The various ethnic groups, influenced by their different educational backgrounds, looked more towards countries like China, India and England as their motherlands.

When the PAP government came into power, it introduced policies to ensure that all schools from the various language streams received equal treatments and both elementary and high schools textbooks were injected with a Singapore background as far as

possible. The goal obviously was to use education as a means for national integration.

With self-rule in 1965, economic considerations took on a larger significance with economic restructuring gaining momentum and nation-building becoming established on a firmer basis. The industrialization program itself had been introduced formally in 1960 under the First State Development Plan 1960-64.

Industrialization prompted the need to create jobs for the rapidly growing labour force, which in turn, required the reorientation of education to vocational and technical subjects. The emphasis on technical education was given a boost with the formation of the Technical Education Department within the Ministry of Education in 1968 to administer technical education and industrial training programs. This emphasis was needed so as to provide the future workforce with the knowledge and skills necessary for the economic development of the country.

VIII. CONCLUSION.

Quite clearly, the development strategies adopted by the PAP government differed from those of the pre-1959 period. Singapore had a more activist and interventionist approach. This approach ranged from the supply of infrastructure facilities by statutory boards for social and economic development to direct participation of the government in industrial, financial and commercial enterprises, and to laying down of clear guidelines to the private sector as to what they could and should do. However, the successful implementation of these policies depended on their acceptance by the people as well as the extent of the sincerity of the political leadership and the efficiency of the bureaucracy. All these conditions have been fulfilled and, Singapore has seen an uninterrupted period of rapid economic growth since 1965.

When all is said and done, it is the people who matter most in Singapore's success story. Capable and dedicated political leadership, a highly efficient bureaucracy, and a disciplined and achievement-oriented society are the basic successful human factors. The power elite have, however, played the decisive role in national development in the post-independence years.

For Singapore, the power elite consists mainly of the political elite and the select professional elite. The professional elite run the various statutory boards and the power elite, a strong and cohesive group, decide, directly or indirectly, on national policies and social values for the country. The two groups have

worked very closely together and therefore, once a policy is made, full support to ensure the success of its implementation can normally be expected from all the members of the power elite.

Such a cohesive power elite will work effectively so long as there is a strong and powerful political leadership which is committed to the service of the people. Fortunately Singapore has a strong, powerful, efficient and well-respected political leadership and has won the reputation of being a corrupt-free society. It is this political leadership that has propelled Singapore as a country with the fastest growing economy in the world today.

In conclusion, as Singapore has an effective government and a corrupt-free bureaucracy, her leaders and people can look ahead with satisfaction at the past and confidence in the future. The experience of Singapore's growth strategies provided a useful model for rapid growth for both developing and developed countries.

APPENDIX A

Singapore's Gross Domestic Product by Industry

Industry	1960	1970	1977	1978	1979	1980	1981	1982
			Ε Ε	llion Sing	Million Singapore Dollars	ars		
Agriculture and Fishing	74.9	133,3	278.8	269.0	289.8	316.7	338.4	330.5
Quarrying	6.1	19.6	48.1	37.5	41.8	75.6	102.0	134.9
Manufacturing	235.6	1,047.9	3,738,2	4,304.9	5,099.1	5,944.4	7,824.8	7,634.4
Utilities	49.7	148.1	281,2	327.3	398.2	466.9	453.8	487.8
Construction	71.7	386.1	1,177.6	1,098.0	1,218.0	1,407.4	2,010.4	2,813.9
Trade	712.5	1,608.3	4,131.6	4,513,1	4,926.8	5,440.4	5,972,9	6,328.6
Tranport and Communication	282.8	595.0	2,020,2	2,374,2	2,492.9	2,735.3	3,604.5	3,875.0
Financial & Business Services224,5	5224.5	757.4	2,038.7	2,242,2	2,574.7	3,157.8	5,142.9	6,333.2
Other Services	360.9	734.4	1,638.7	1,793.0	1,984,9	2,262,5	2,582,2	3,236.9

Suorces: Singapore Ministry of Trade and Industry, Economic Survey of Singapore 1980 and The Europa Year Book 1984.

NOTES

- 1. Bonavia, David, "Singapore's Dark Horizon", <u>Far Eastern Economic</u> Review, 23 February 1967, p.329.
- 2. Buchanan, Iain, Singapore in Southeast Asia, An Economic and Political Appraisal, London, G. Bell and Sons, Ltd., 1972, p. 310.
- 3. Figures produced by Euromoney's 1984 World Economic Performance Ranking as reported in The Singapore Monitor, 9 October 1984, p. 12.
- 4. In Goh Keng Swee's speech at the Kreta Ayer's National Day Celebration Dinner on 6 August 1984 as reported in The Straits Times, 7 August 1984, p.1.
- 5. Ibid.
- 6. Ministry of Trade and Industry, Economic Survey of Singapore 1982, Singapore, Singapore National Printers, 1983, p. 75.
- 7. Nair, C. V. Devan, ed., <u>Socialism That Works The Singapore Way</u>, Singapore, Federal Publications, 1976, p. 84.
- 8. The Straits Times, 31 December 1969, p. 1.
- 9. Asiaweek, 20 March 1981, p. 26.
- 10. IMF, <u>Balance of payments statistics</u>, 1981 and IMF, <u>Balance of payments yearbook</u>, 1979, pp. 522 523.
- 11. In Rajaratnam's speech at the tenth anniversary dinner of the Singapore National Union of Journalists on 13 December 1970, The Straits Times, 14 December 1970. p. 2.
- 12. Wawn, Brian, The Economies of the ASEAN Countries: Indonesia, Malaysia, Phillipines, Singapore and Thailand, New York, St Martin's Press, 1982, p. 121.
- 13. The Straits Times, 18 September 1971, p.1.
- 14. Singapore, Housing and Development Board, HDB Annual Report 1979/80, Singapore, Housing and Development Board, 1980, p.6.
- 15. Ibid.

SELECT BIBLIOGRAPHY

BOOKS

Buchanan, Iain, <u>Singapore in Southeast Asia</u>, London, G. Bell & Sons Ltd., 1972.

Goh Keng Swee, <u>The Practice of Economic Growth</u>, Singapore, Federal Publications, 1977.

Lim Chong Yah, Economic Development in Southeast Asia, Singapore, Federal Publications, 1980.

Nair, C. V. Devan, Not By Wages Alone, Selected Speeches and Writings of C. V. Devan Nair 1959 - 1981, Singapore, Singapore National Printers (Pte.) Ltd., 1982.

Nair, C. V. Devan, <u>Socialism That Works - The Singapore Way</u>, Singapore, Federal Publications, 1976.

Our Heritage and Beyond: A Collection of Essays on Singapore, its Past, Present and Future, Singapore, Singapore National Trade Union Congress Publications, August 1982.

Wawn, Brian, The Economics of the Asean Countries: Indonesia, Malaysia, Philliphines, Singapore and Thailand, New York, St Martin's Press, 1982.

NEWSPAPERS AND PERIODICALS

Asia 1984 Yearbook, Hong Kong, Far Eastern Economic Review, 1984, pp. 252 - 257.

Asia and Pacific Annual Review, 1984, pp. 177 - 183.

Bonavia, David, "Singapore's Dark Horizon", <u>Far Eastern Economic Review</u>, 23 February 1967, pp. 327 - 329.

IMF, Government Finance Statistics Yearbook, 1984, pp. 522 - 523.

Lim, Linda Y. C., Singapore's Success: The Myth of the Free Market Economy, Asian Survey, June 1983, pp. 752 - 763.

Singapore: A Coming of Age, Asiaweek, 20 June 1980, pp. 26 - 30.

Singapore, Department of Statistics, Yearbook of Statistics, 1984.

<u>Singapore</u>, <u>Ministry of Trade and Industry</u>, <u>Economic Survey of Singapore</u>, 1982, 1983.

Singapore Monitor.

Singapore's Winning Strategy, Asiaweek, 21 March 1980, pp. 40 - 41.

Straits Times.

The Singaporean, Asiaweek, 7 September 1984, pp. 25 - 49.

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